Shamrock Honeycomb-Calcite Mining Project

Duchesne County, Utah
September 2004

Supplement to the Environmental Assessment Dated July 2004

SHAMROCK HONEYCOMB-CALCITE MINING PROPOSAL

SUPPLEMENTAL ENVIRONMENTAL ASSESSMENT

This supplement to the July, 2004 Environmental Assessment is for the purpose of clarifying some aspects of the analysis and is the result of public comments received during the official comment period for this project.

Nothing in this supplemental EA changes the results of the analysis and evaluation in the EA, including the disclosed impacts. The information presented in this supplement is intended to further clarify aspects of the proposal and the resulting environmental effects of implementing the project.

3.4 Inventoried Roadless Areas

The July 2004 EA was unclear in some aspects of its discussion of the inventoried roadless areas status and analysis.

The project area has been an active mining and prospecting site for many years, but due to mapping errors when putting together the inventoried roadless areas for the Roadless Area Conservation Initiative (RACI), the mine site was erroneously included in the inventory. As it is included in the inventory, the effect of the project on roadless lands is included in the EA.

The discussion in the EA, particularly section 3.4(c), is correct as far as the effects on Natural Integrity, Apparent Naturalness, Remoteness, Solitude, and Opportunities for Primitive Recreation. These characteristics are analyzed for the purpose of determining the effect of the project on the future potential of the area for designation as a part of the National Wilderness Preservation System. The project will result in one to five acres no longer having the potential for future wilderness designation. The five acres represents about .0003 % of the inventoried roadless lands in the Uinta Mountains in Duchesne County.

The RACI Final Environmental Impact Statement, published in January 2001, identified several resources that define roadless character. Although at the time of this writing, the RACI is enjoined nationally from implementation, the identified attributes for defining wilderness character are useful for analysis of the impacts of the project on roadless character. For clarification purposes each of these is discussed below:

> Soil, Water and Air Resources – these are described in the EA in Chapter 3 and 4 pages 18, 33, 40-45, and 78.
>
> Sources of public drinking water – there are no sources of public drinking water in the project area.

Diversity of plant and animal communities – these are described in the EA in Chapters 3 and 4 pages 19-33 and 47-78.

Habitat for TES and species dependent of undisturbed area of land – these are described in the EA in Chapters 3 and 4 pages 19-21 and 48-52.

Primitive and semi-primitive classes of recreation – the project will not affect these classifications nor change the nature of the recreation opportunities in the area.

Reference landscapes for research study or interpretation – there are no reference landscapes within the project area.

Landscape character and integrity – the Shamrock Honeycomb-Calcite Mine has been a disturbed site for many years. This project will not alter the existing character or integrity of the landscape.

Traditional cultural properties and sacred sites – there are no traditional cultural properties or sacred sites within the project area.

There are no other locally unique characteristics.

Below are listed some clarifications in the Appendices for the EA.

Appendix A. Literature Cited

Oliver, George. Telephone interview. August 2004. Utah Division of Wildlife Resources, Venal Utah.

Oliver, George. Telephone interview. September 2004. Utah Division of Wildlife Resources, Venal Utah.

Bunnell, K. D.; J. J. Shirley; J. T. Flinders; M. L. Wolfe; J.A. Bissonette. 2004. Forest Carnivores Occurrence, Distribution and Limiting Factors: Canada Lynx and Wolverine Surveys in Utah, Final Report to Utah Division of Wildlife Resources, U.S. Forest Service, U.S. Fish & Wildlife Service.

Appendix C. Table of T&E, Sensitive Species, & MIS and Their Occurrence in the Project Area

Townsend's big-eared bat and Spotted bat –
The table on page 90 (Appendix C, Item 1) states that the small cave near the mine site is above the elevational limits for the Townsend's big-eared bat and spotted bat. The following section discloses additional information recently acquired regarding these two bat species.

Two unidentified bats were seen in the small cave in June of 2003. The likelihood of these bats being the Townsend's big-eared bat or the spotted bat is very low, because of the elevational limits (8851 ft. and 9200 ft. respectively) of these two bat species. Additional information about the Townsends's big-eared bat and spotted bat was acquired on August 8th, 2004 and September 1st 2004 through personal communication with George Oliver (UDWR Biologist and author of The Bats of Utah a Literature Review). George Oliver agreed that the small cave (approximately 10,500 ft. in elevation) near the mine site is above the elevations that these two bat species have been found and temperatures in caves at that elevation would likely exclude both these bats. George Oliver stated that the two bats that were seen in the cave in 2003 were likely the big brown bat or the long-legged myotis. Oliver also stated that because of the distance of the cave from the mine site (approximately 600 feet), noise disturbance from the mining activities is not likely to disturb bats roosting in the cave. (Oliver August & September 2004, pers. com.)

This additional information supports the determination in the table on page 90 of the EA, which states the small cave is likely above the elevational limits of the Townsend's big-eared bat and the spotted bat. Also, because of the distance of the cave from mining activities, bats roosting in the cave (regardless of species) would not be disturbed from activities of the proposed project.

Wolverine –
The table on page 90 (Appendix C, Item 1) states that local extirpation of the wolverine is likely. Recent studies summarized in a report recently released to the Utah Division of Wildlife Resources, US Forest Service, and US Fish & Wildlife Service documented a single set of tracks in 2003 and 2004 on the North Slope of the Uintas (Wasatch-Cache NF) to be either wolverine or fisher tracks. The report stated, though the tracks are not confirmed to be wolverine, it is the opinion of the author that there is evidence that the tracks were made by wolverine. The location of these tracks is more than 17+ air miles from the proposed project, is on the on the other side of the crest of the Uintas, and is not located on the Ashley NF. There has been no confirmed evidence that wolverine occur on the Ashley NF. Additionally the project area does not occur in remote areas, typical of wolverine habitat. It is therefore determined that the proposed project would not impact the wolverine because of the following reasons: the tracks mentioned above are not confirmed to be made by wolverine; the proposed project occurs on the other side of the crest of the Uinta Mountains, and is 17+ air miles away from the location of the tracks; the proposed project does not occur in remote areas, typical of wolverine habitat; and there is no confirmed evidence that wolverine occur on the Ashley NF.

Content Analysis and Summary of Comments And Forest Service Responses

Shamrock – Honeycomb Calcite Mining Proposal Duchesne/Roosevelt Ranger Districts Ashley National Forest

Environmental Assessment - Dated July 2004

The following organizations sent comment letters to the Ashley National Forest on the "Shamrock – Honeycomb Calcite Mining Proposal, Environmental Assessment", dated July 2004 (EA): (5 comment letters were received)

I. **Local Government Offices** *(2 comment letters)*	II. **State of Utah Offices** *(2 comment letters)*	III. **Private Organizations** *(1 comment letter)*
A. Uinta County Commission – David Haslem, Jim Abegglen, and Michael McKee. B. Duchesne County Planning, Zoning, & Community Development– Mike Hyde.	A. Governors Office of Planning and Budget – John Harja. B. Utah Division of Oil Gas and Mining (DOGM) – Paul Baker.	A. Utah Environmental Congress – Stephanie Tidwell.

The content analysis/summary of each comment within each of the 5 letters, and corresponding Forest Service responses are presented below.

Comments are listed by resource under the headings and organization/names displayed in the above table. Forest Service responses follow the listing of comments, and are reference back to the corresponding comments.

I. Local Government Offices - (2 comment letters)

A. Uintah County Commission – David Heslem, Jim Abegglen, and Michael McKee, Commissioners

The Proposed Action

1.

Uintah County supports the proposed action

Environmental Impacts

The EA has provided a thorough analysis of environmental impacts, and it appears there would be very little adverse impacts to T&E species, and no impacts to existing recreation or livestock grazing.

Forest Service Response –

Comments are acknowledged. No response needed.

B. Duchesne County Planning, Zoning, and Community Development – Mike Hyde

1. Bonding for Potential Damage to County Roads

Please require Shamrock Mining to contact Duchesne County, to make arrangements for posting a bond, to cover repair of road damage caused by dump truck traffic.

2. Air Quality near Alfalfa Fields

Please require Shamrock Mining to contact Lamont Moon, a local landowner, to discuss ways to control dust along the county road, and to implement a treatment that is equitable to Shamrock and the agricultural interests.

Forest Service Response –

The Forest Service will require Shamrock Mining to make these recommended contacts.

II. State of Utah Offices - (2 comment letters)

A. Governors Office of Planning and Budget – John Harja

1. Air Quality

A permit, known as an Approval Order, is not required solely for the control of fugitive dust, but steps need to be taken to minimize fugitive dust. A "Notice of Intent" should be submitted to the Utah Division of Air Quality, if any on-site crushing of stone occurs.

Forest Service Response –

No on-site crushing of rock will occur. We do not expect fugitive dust to be a problem for this project, based on past experience. If dust does become a problem, then Shamrock will be required to take appropriate steps to control or minimize dust emissions from their operations. See section 4.6b (pages 44-46) and Appendix B (page 88) of the EA.

B. Utah Division of Oil, Gas, and Mining – Paul Baker

1. Plan of Operations

Has there been an update to the plan since April 2003? Is the Plan of Operations still marked confidential? Has this plan been signed by the operator?

Forest Service Response –

The most recent Plan of Operations for this project is dated February 24, 2003. This plan is still marked confidential, but the information contained within it is not considered to be confidential. The Plan of Operations was signed as submitted by Shamrock Mining, and as received by the Forest Service, on February 2003. Final acceptance of the plan by the operator and Forest Service would occur as part of the final approval process for this project.

2. Air Quality

Is an Air Quality Approval Order required for this project?

Forest Service Response –

An Air Quality Approval Order is not required, per a letter from the Utah Division of Air Quality, dated April 10, 2003. See also the comment and Forest Service response listed in section II A 1 of this document.

3. Project Location

Has the legal description been corrected to include the base and meridian?

Forest Service Response –

Yes. The legal description for the project area is listed in the EA (section 1.0, page 1) as being "in Section 28, T2N, R8W, USM" where USM represents the Uinta Special Base and Meridian.

4. Project Bonding

DOGM now requires bonding for reclamation on all mining and exploration projects. Is the Forest Service planning to hold a bond for this site?

Forest Service Response –

Yes. The Forest Service will require a Reclamation Bond to insure that reclamation activities are kept current and comply with the mitigation requirements.

III. Private Organizations - (1 comment letter)

A. Utah Environmental Congress – Stephanie Tidwell

1. Impacts to Inventoried Roadless

The proposed mine expansion lies entirely within an Inventoried Roadless Area. The proposed action would not only impact the immediate area being mined, but would result in noise pollution, potential water pollution, potential air pollution, and additional heavy truck traffic on several miles of single lane Forest road.

According to Forest maps, the calcite mine lies entirely within an inventoried roadless area, yet the EA states (p. 37) "The existing access road, mine area and all mine operations are outside of the inventoried roadless area."

Forest Service Response –

It is true that the mine is in the roadless area as mapped for the Roadless Area Conservation Initiative (RACI) published in January 2001. This mine long predates the inventory and the mine area should have been excluded from the inventory. Regardless, the EA discusses the effects of the project on roadless character of the area (See EA pages 37-39) for purposed of potential wilderness designation. The supplemental EA further discusses the effects of this proposal on the roadless characteristics as they were defined in the RACI.

Our statement that the project area is outside the adjacent inventoried roadless area was incorrect. For impacts to recreation users and noise and air and water quality, see section 4.1 (recreation, page 35-36), and section 4.6 (hydrology / water quality and air quality, pages 40-46). See also the additional information provided in the Supplemental EA.

2. Impacts to Lynx

With the recent Lynx sightings in Utah, the importance of maintaining Lynx habitat is heightened. Expansion of mining facilities within the LAU is likely to degrade habitat quality, which goes against LRMP guidelines. Although the EA states (p. 48) that less than 1% of the LAU would be impacted, other cumulative impacts (grazing) to the LAU must also be factored into this analysis. Further, the noise associated with the project extends much further than the physical project area, and this should be more seriously considered.

Forest Service Response –

We acknowledge that an individual lynx from the Colorado Reintroduction Program recently dispersed and passed through the Ashley National Forest. This Environmental Assessment was written before the radio-collared lynx from Colorado dispersed onto the Ashley National Forest (summer of 2004). This radio-collared lynx was previously released in Colorado as part of the Colorado Reintroduction Program. This individual lynx has since moved off the Forest and moved south towards Beaver Utah. Prior to this occurrence, the last definitive sighting of Canada lynx in the Uinta Mountains was in 1972 (ANF unpublished data). If subsequent locations obtained from the Colorado Division of Wildlife indicate that this or any other lynx is occupying LAU 4, the Forest Service will reinitiate consultation with the US Fish & Wildlife Service.

On page 51, the EA provides a detailed analysis of lynx habitat that would be directly affected by the proposed project. Refer to this page for the acreage and percentage calculation of lynx habitat affected by the proposed project. Page IV-30 of the Ashley LRMP states that resource management activities will be allowed if they will not adversely affect any T&E or sensitive species (Ashley NF LRMP 1986). The EA (pages 48-52), the Biological Assessment (BA) prepared for this project, and the US Fish & Wildlife Service Biological Opinion (BO) (available from the Roosevelt District Office upon request) provide a detailed analysis of the affects of the project on lynx habitat within LAU 4. The analysis in these documents found that the project may affect, but is not likely to adversely affect the Canada lynx. Because of this determination and the rationale provided in these documents, the proposed project is consistent with the above LRMP guideline. Rationale for this determination can be found in the BA, BO, on pages 48-52 of the EA, and in the paragraphs below.

The spruce/fir in the area around the mine is patchy and does not provide quality snowshoe hare or lynx habitat. Also, with the current rate of mining, lynx likely avoid the area. Because of the lack of quality habitat and the likelihood that lynx currently avoid area, increasing the rate of mining in the area, is not likely to change lynx use patterns in the LAU. Furthermore, because the project would occur during the less stressful period (summer/fall) rather than the winter and denning periods, and the habitat in the area not providing quality snowshoe hare and lynx habitat, it is determined that noise disturbance from the proposed project in either alternative is not likely to adversely affect the Canada lynx (refer to the EA pages 48-50, Biological Assessment, US Fish & Wildlife Service Biological Opinion).

Cumulative impacts to lynx and lynx habitat, including grazing, were considered and analyzed in the EA on pages 50-52. The EA states on page 51 that range conditions on the Blind Stream Allotment are at, or are moving towards desired condition (vegetation is at or moving towards mid seral or higher conditions, and aspen sprout survival is sufficient to perpetuate the long term viability of the clone, etc.)(Blind Stream Allotment range studies, EA page 51). It is therefore determined that this allotment is meeting the standards and guidelines in the LCAS as it relates to grazing. Therefore, the effects of cattle grazing combined with the proposed project would be negligible.

3. Impacts to Three-Toed Woodpecker

Expanded mining operations could also impact three-toed woodpecker, which is known to inhabit the project area.

Forest Service Response –

Woodpecker surveys in August of 2004 were conducted in the project area and two three-toed woodpeckers were detected approximately ¼ mile from the mine site, however no nests or cavities were found (Ashley NF unpub. data). Woodpecker surveys in August of 2004 were also conducted in habitat along the access roads, and no woodpeckers were detected (Ashley NF unpub. data). The EA analyzes the effects of the proposed project on the three-toed woodpecker on pages 55-57 and cumulative impacts on pages 59-61. The EA and the Biological Evaluation both determine that three-toed woodpeckers may be temporarily displaced from habitat near the project area. However, both these documents also state that this displacement would not lead towards a trend of federal listing of this species, because there is no removal of nesting habitat and there is ample habitat in the drainage away from disturbances for dispersing individuals. These documents further state that three-toed woodpeckers are likely habituated to the current level of mining activities and use of the access roads, and the level of noise disturbance along the roads would be small in relation to the current use of the road. For details on this rationale refer pages 55-57 and 59-61 of the EA and the Biological Evaluation.

4. Impacts to Management Indicator Species

The ongoing decline of MIS mule deer populations is of concern to the Forest, and this project is in an area that has relatively high deer populations. It is likely that expanded mining activities will impact mule deer habitat.

Red-naped sapsuckers, warbling vireo, Lincoln's sparrows, and song sparrows exist in the project area and near the access road, they too are likely to be impacted by expanded mining activities and the associated increased traffic. As red-naped sapsucker populations are on the decline, more information on the severity of impacts this project could have on this species should be acquired.

The absence of goshawk and cutthroat trout in the project area also highlights the deficiencies of the Forest's recent decision to drop all other MIS. Since neither is known to inhabit this area, the Forest will no longer have an MIS to effectively base its analysis of the area's overall health.

Forest Service Response –

The EA acknowledges on page 25 that the mule deer population on the Forest appears to be on a declining trend. However, the EA states on this same page that the Forest is providing well-distributed habitat across the Forest and continues to sustain a viable mule deer population. The decline in the mule deer population, previously mentioned, appears to be spread statewide (UDWR Statewide Management Plan for Mule Deer 2003). This has been attributed to several years of drought followed by an unusually hard winter (UDWR Statewide Management Plan for Mule Deer 2003). The years following the decline, the deer population rebounded slowly

(UDWR Statewide Management Plan for Mule Deer 2003). However, due to the current drought, the deer population has again taken a downward trend since 2000 (UDWR Statewide Management Plan for Mule Deer 2003). The EA determined that individual mule deer may be temporarily displaced from habitat near the project area. However, the EA also states that this displacement would not adversely affect the mule deer population, because there is ample habitat in the drainage, and across the Forest, away from disturbances for dispersing individuals. The EA further states that the mule deer population viability and trend would not be affected by the proposed project, because the size of the project area (4 acres of actual ground disturbance) in relation to mule deer habitat on the Forest (habitat is Forest wide, UDWR Mule Deer Habitat Mapping) is small in size; there is no removal of cover habitat or fawning habitat; there is no critical winter habitat within the project area; mule deer are likely habituated to the current level of mining activities and use of the access roads; and the level of noise disturbance along the roads would be small in relation to the current use of the road. Furthermore, hunting and weather conditions are factors that generally drive mule deer populations. For details on this rationale refer to pages 61-64 and 70-72 of the EA.

The EA analyzes the effects of the proposed project on red-naped sapsuckers, warbling vireos, Lincoln's sparrows, and song sparrows on pages 66-70 and cumulative impacts on pages 70-72. Habitat for these species do not occur near the mine site and therefore would not be affected by activities associated with the area of the mine (pages 66 and 68 of the EA). The EA states that habitat does occur along access road 135. The EA also states that hauling of ore along access road 135 at the rate described in Alternatives A and B would not adversely affect these species habitat (including the red-naped sapsucker) or affect these species population viability and trends, because the use of the access road from the hauling of ore under these two alternatives is a small amount in relation to the current public use and current use from mining traffic. Furthermore, these species are likely habituated to the current level of use of the access road. Because of the same rationale above (the use of the access road from the hauling of ore under these two alternatives is a small amount in relation to the current public use and current use from mining traffic), individuals of these species nesting near the access road would also be habituated to the current level of use of the road and are not likely to abandon nests or be adversely affected by the rate of hauling in these alternatives. Nesting individuals that would be sensitive to disturbance from traffic along the road likely nest a considerable distance from the road, and would not be affected by ore hauling trucks using the road. It should also be noted that there would no removal of nesting habitat for either of these species from the proposed project. The EA also states on pages 29-31 that the Forest provides well distributed habitat for these species across the Forest. From the above rationale and the rationale in the EA, it is determined that noise disturbance and use along access road 135 from hauling of ore would not adversely affect these species habitat, population trend or viability (including the red-naped sapsucker). For more details on this rationale refer pages 28-31, 66-70 and 70-72 of the EA.

In August of 2004 goshawk surveys were conducted in goshawk habitat along and near the access roads and no goshawks were detected (Ashley NF unpub. data). Although there are no goshawk territories within the project area and no goshawks have been detected during calling surveys in the area, habitat is present along the access roads. Therefore effects from the proposed project to the goshawk and goshawk habitat were analyzed in the EA. Effects to goshawks from the proposed project are analyzed in the EA on pages 52-54, 59-61, 64-66, 70-

72, and in the Biological Evaluation. Both documents state that the proposed project would not lead towards a trend of federal listing of this species. Rationale for this determination can be found in the EA on the pages listed above and in the Biological Evaluation. Comments on the MIS Amendment, to the Ashley NF Plan, are outside the scope of this analysis.

5. Impacts to Water Quality

Although Blind Stream is intermittent above and below the calcite mine, the proposal to excavate as deep as 30 feet could impact the associated water table. More should be known about the impacts of deeper excavation on water quality.

Forest Service Response –

The project area overlies a considerable thickness of soluble limestone bedrock. Although not specifically discussed in the EA, it is expected that the water table within the project area would lie very close to the base of the soluble limestone. From existing geologic maps, the base of the limestone appears to be roughly 400 to 800 feet below the surface, making it highly unlikely that the proposed excavation would encounter or impact the local water table.

6. Cumulative Effects

The EA states (p. 35-36) that cumulative "impacts can be adequately mitigated" through the submission of a safety plan, signage, and headlights. The only effect noted is minimal impacts recreation. However, the EA also states that the Forest road is single lane, and it is likely that additional heavy truck traffic could pose a safety risk to other road users.

Forest Service Response –

As noted in the EA, additional safety risks from the heavy truck traffic can be adequately mitigated. See section 4.1 of the EA (page35-36). This will be done in two ways. Firstly, by limiting or eliminating heavy truck traffic during weekends, holidays, and general hunting seasons, when most of the visitor and recreation traffic occurs. Secondly, by making sure that Forest visitors are fully aware of the additional truck traffic. See mitigation measures 7 and 8, in Appendix B of the EA (pages 88-89).

7. Reclamation Activities

The proposed action would mandate concurrent reclamation involving contouring and native seed planting as the project moves forward. However, since most of the soil type is of a rocky, sterile nature, success seed germination is suspect. More detailed reclamation plans are needed to ensure adequate recovery.

Forest Service Response –

Because of the rocky nature of the soil, and uncertainty of successful seed germination, the best methods for successful reclamation are difficult to predict. For this reason, the Forest Service intends to be closely involved with seasonal reclamation activities, to determine the optimum methods for successful reclamation and revegetation. See Appendix B, Item 1 (page 88) and section 2.0 (proposed action, page 6-7). Also, the poor-quality nature of the existing soil does not support lush or abundant vegetation to begin with. With that in mind, even a partial revegetation failure may result in an improvement of what already exists at the site.